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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/676,053	09/28/2000	James Oliver Dolly	A-05012DIV1(17044DIV1(AP)	2480

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EXAMINER
ZEMAN, ROBERT A

ART UNIT	PAPER NUMBER
1645	

MAIL DATE	DELIVERY MODE
06/09/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/676,053	DOLLY ET AL.	
	Examiner	Art Unit	
	ROBERT A. ZEMAN	1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *31,32 and 35-45* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *31,32 and 35-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The response filed on 11-23-2007 is acknowledged. Claims 31-32 and 34-35 are pending and currently under examination.

Claim Rejections Maintained

35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The new matter rejection of claims 31-32 and 34-45 under 35 U.S.C. 112, first paragraph, based on the limitation in claims 31 and 38 "wherein the active neurotoxin possesses mouse lethality of 3.3×10^5 LD_{50}/mg or greater …" is maintained for reasons of record.

Applicant argues:

1. The subject matter of a claim need not be claimed literally.

2. The examiner has failed to present evidence or reasons why a person of ordinary skill in the art would not recognize that the written description of the invention provides support for the claims.

3. Page 9 of the specification discloses that active neurotoxins can be linked to drug molecules and used to treat neuromuscular maladies.

4. Example 4 discloses that Glu_{234} is essential for the catalytic activity of the TeTx light chain.

5. The specification (on page 3) discloses that Clostridial neurotoxins can be inactivated by an amino acid change in its light chain.

6. Example 6 discloses that dichain Clostridial neurotoxin reconstituted from Ala_{234}- light chain and native H-chain "had no toxic activity" (<50 LD_{50}/mg) while the dichain from native H chain and the recombinant L chain exhibited toxicity.

7 A mouse lethality of 3.3×10^5 LD_{50}/mg is an indication of toxicity as this term is used in the specification.

8. The experiment of Example 20 shows that the mouse lethality test is used as a measure of toxicity of all dichain neurotoxins.

9. The specification discloses that all Clostridial neurotoxins encompassed by the instant claims are structurally and functionally similar, thus a person of ordinary skill in the art would realize that a mouse lethality of 3.3×10^5 LD_{50}/mg is an indication of an “active” neurotoxin.

Applicant’s arguments have been fully considered and deemed non-persuasive.

With regard to Points 1 and 2, while the specification is not required to provide literal support for a given limitation, there must be implicit support for said limitation. Limitations recited in the context of a specific example do not necessarily provide support of a broad genus.

With regard to Point 3, the rejection is not based on limitation of a neurotoxin being joined to a neuropharmacological agent but on the recited mouse lethality.

With regard to Points 4-8, the recited portions of the specification deal specifically with TeTx and cannot be extrapolated to all Clostridial neurotoxins. Moreover, contrary to Applicant's assertion, a mouse lethality of 3.3×10^5 LD_{50}/mg has only been disclosed to constitute an

indication of toxicity with regard to TeTx dichains. Applicant is reminded that the instant claims encompass all Clostridial neurotoxins as well as the dichain neurotoxins derived from them.

With regard to Point 9, as illustrated by Applicant, the mouse lethality associated with different Clostridial neurotoxins varies widely (see Example 6 and 20). Consequently, Applicant's assertion that the threshold of a mouse lethality of 3.3×10^5 LD_{50}/mg in determining the "activity" of a given neurotoxin is not supported by the specification. Moreover, given such a variation in activity among neurotoxins, the skilled artisan, contrary to Applicant's assertion, would not conclude that a mouse lethality of 3.3×10^5 LD_{50}/mg is the activity threshold for all Clostridial neurotoxins.

As outlined previously, the limitation the limitation in claims 31 and 38 "wherein the active neurotoxin possesses mouse lethality of 3.3×10^5 LD_{50}/mg or greater …" does not appear in the specification, or original claims as filed. The portion of the specification cited by Applicant provides support for only a TeTx reconstituted with either native HC and LC or native HC and recombinant LC but for all the active neurotoxins encompassed by the instant claims. Therefore this limitation is new matter. Moreover, the newly added range has no upper limit and therefore cannot be supported by two data points.

Conclusion

No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT A. ZEMAN whose telephone number is (571)272-0866. The examiner can normally be reached on Monday- Thursday, 7am -5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shanon Foley can be reached on (571) 272-0898. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov.

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert A. Zeman/
Primary Examiner, Art Unit 1645
August 14, 2007